Physics SS1.

1. The electrical appliances in a house are listed as follow: five 100w bulbs, TV 240w, fridge 200w, electric heater 120w, three ceiling fan rated at 150w. if the appliances are switch on for 13 hours every. Calculate the cost of electrical energy consumed in a month(30 days) if it is 5o kobo per unit
2. A 10Ω resistor is connected across a 5 volt power supply. What is the resulting current?
3. Mention 2 safety devices you know
4. Calculate the total resistance between X and Y for the following combinations of resistors.

(a)

10 

X

Y

20 

10 

(b)

10 

X

Y

10 

10 

10 

(d)

25 

X

Y

5 

20 

10 

(c)

20 

X

10 

4 

10 

5 

1 

1. An electric iron with heating element of resistance 60Ω is connected to the 240v mains. Calculate the electrical power produced